

In the claims:

1-20 (Cancelled)

21. (Currently amended) A device for controlling the delivery of an aerosolized active agent to the lungs of a human patient, said device comprising a valve flow resistance modulator that provides a high flow resistance of at least $0.4 \text{ (cm H}_2\text{O)}^{1/4} / \text{SLM}$ at the onset of the patient's inhalation and that subsequently opens to provide provides a lower flow resistance, wherein the lower flow resistance allows for a higher flow rate through the device.

22. (Previously added) A device according to claim 21 wherein the high flow resistance is a resistance of between 0.4 and $2 \text{ (cm H}_2\text{O)}^{1/4} / \text{SLM}$.

23. (Previously added) The device of claim 21 wherein the lower flow resistance is a resistance between 0 and $0.3 \text{ (cm H}_2\text{O)}^{1/4} / \text{SLM}$.

24. (Previously added) The device of claim 21 wherein the high flow resistance corresponds to a flow rate of 15 liters per minute or less.

25. (Previously added) The device of claim 21 wherein the lower flow resistance corresponds to a flow rate of 15-80 liters per minute.

26. (Previously added) The device of claim 21 wherein the high flow resistance is provided for an initial time period of less than 10 seconds.

27. (Previously added) The device of claim 21 wherein the high flow resistance is provided for an initial time period of less than 5 seconds.

28. (Currently amended) A device for controlling the delivery of an aerosolized active agent to the lungs of a human patient, said device comprising a valve flow resistance modulator that provides a high flow resistance at the onset of the patient's inhalation and which corresponds to a flow rate of about 15 liters per minute or less and that subsequently opens to provide provides a lower flow resistance which corresponds to a higher flow rate.

29. (Previously added) The device of claim 28 wherein the lower flow resistance corresponds to a flow rate of between about 15 and 80 liters per minute.

30. (Previously added) The device of claim 28 wherein the high flow resistance is a resistance of between about 0.4 and 2 (cm H₂O)^{1/2} / SLM.

31. (Previously added) The device of claim 28 wherein the high flow resistance is provided for an initial time period of less than about 10 seconds.

32. (Currently amended) A device for controlling the delivery of an aerosolized active agent to the lungs of a human patient, said device comprising a valve flow resistance modulator that is adapted to provide a first flow resistance at the onset of the patient's inhalation and that subsequently opens to provide provides a second flow resistance, the second flow resistance being less than the first flow resistance, wherein the second flow resistance allows for a higher flow rate.

33. (Previously added) The device of claim 32 wherein the first flow rate is provided for an initial time period of less than about 10 seconds.

34. (Previously added) The device of claim 32 wherein the first flow rate is less than about 15 liters per minute.

35. (Previously added) The device of claim 34 wherein the second flow rate is between about 15 and 80 liters per minute.

36. (Previously added) The device of claim 32 wherein the first flow resistance provides a first flow rate and wherein the second flow resistance provides a second flow rate.